Hunters Point Naval Shipyard
Environmental Program
Program Update

Hunters Point Shipyard Citizens Advisory Committee
Environmental & Reuse Subcommittee Meeting
July 18, 2023

Michael Pound
BRAC Environmental Coordinator

Sean-Ryan McCray
Remedial Project Manager

Wilson Doctor
Remedial Project Manager

Brian Londquist
Remedial Project Manager

Hunters Point Naval Shipyard
Navy Base Realignment and Closure (BRAC)

Agenda

Topic	Team Member
• Introductions	Michael Pound
• HPNS Bus Tour Overview	Michael Pound
• Tech Talk: Dust Control During Fieldwork	Sean Ryan McCray

• Building Demolition
  • Parcel B Fieldwork Update (Building 123)
  • Special Congressional Authorization Update
	
	Sean-Ryan McCray
	Michael Pound

• Radiological Retesting: Parcels D-2, UC-1, UC-2, UC-3	Brian Londquist
• Five-Year Review Overview	Wilson Doctor
• Strontium-90 Update	Michael Pound
• Contacts	Michael Pound
• Questions	Navy Team

Hunters Point Naval Shipyard
Navy Base Realignment and Closure (BRAC)

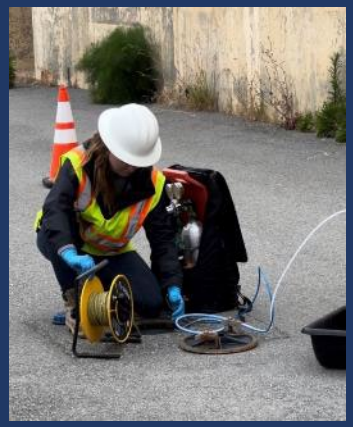
Navy Bus Tours: June 10, 2023

Opportunity for the community to learn more about cleanup activities and technologies at HPNS

Bus Tour Overview

Stop 1: Field Equipment
Examples of various types of typical equipment used for radiological scans

Stop 2: Groundwater Sampling
Demonstration of groundwater collection and discussion about data analysis



Stop 3: Air Monitoring
Discussion about location, use, and data collected by air monitoring equipment

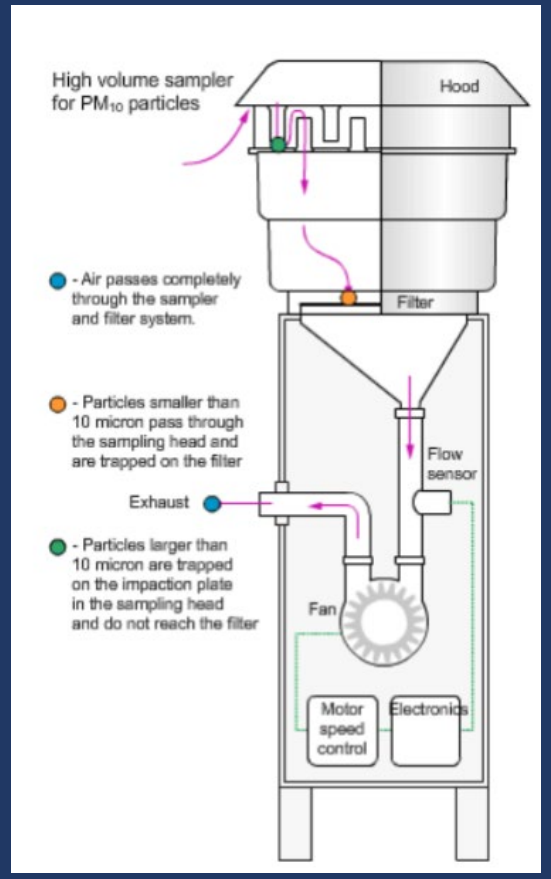
Question Topics:

- radiological screening yard (RSY) pads
- source(s) of radiological contamination
- reuse of materials from building demolition
- safety of durable covers across shipyard
- long-term plan for Parcel E-2
- groundwater levels and ways Navy will update community

TECH TALK: Dust Control During Demolition

Air Quality Sampling and Reporting

- The Navy develops Dust Monitoring Plans and Air Sampling Plans with regulatory agencies
- Several air monitoring stations are placed upwind and downwind of active construction sites at HPNS
- Equipment collects air samples on filters that are sent to an off-site laboratory for analysis
- Real-time monitors are used to ensure workers and community members remain safe

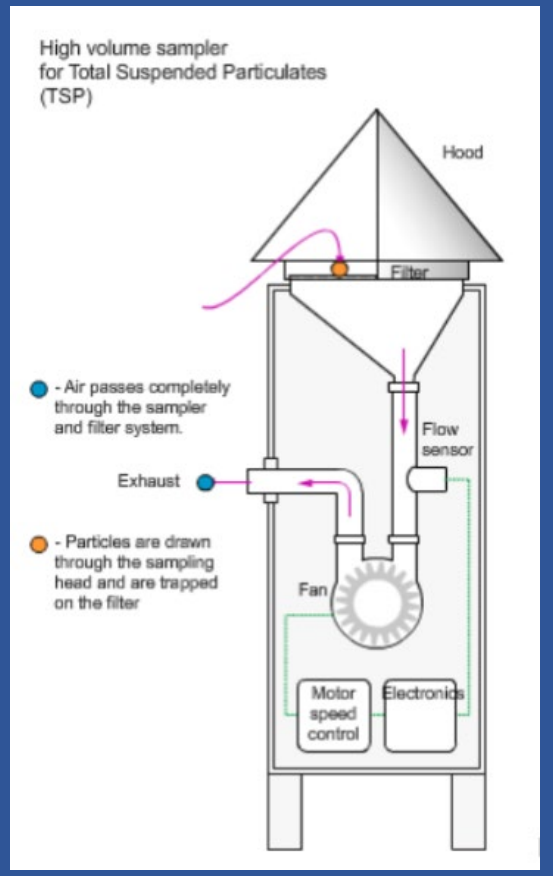


High Volume Sampler for Particulate Matter-10 (PM10)

- **PM10** are particles with a diameter of 10 micrometers or less
- PM10 particles are small enough to enter the lungs and may lead to health issues
- Samples collected from HPNS air filters are analyzed for dust as PM10

High Volume Sampler for Total Suspended Particulates (TSP)

- **Suspended particulates** are small bits of solid materials or liquids that can become airborne.
- Air filters from HPNS monitors are analyzed for TSP, lead and manganese



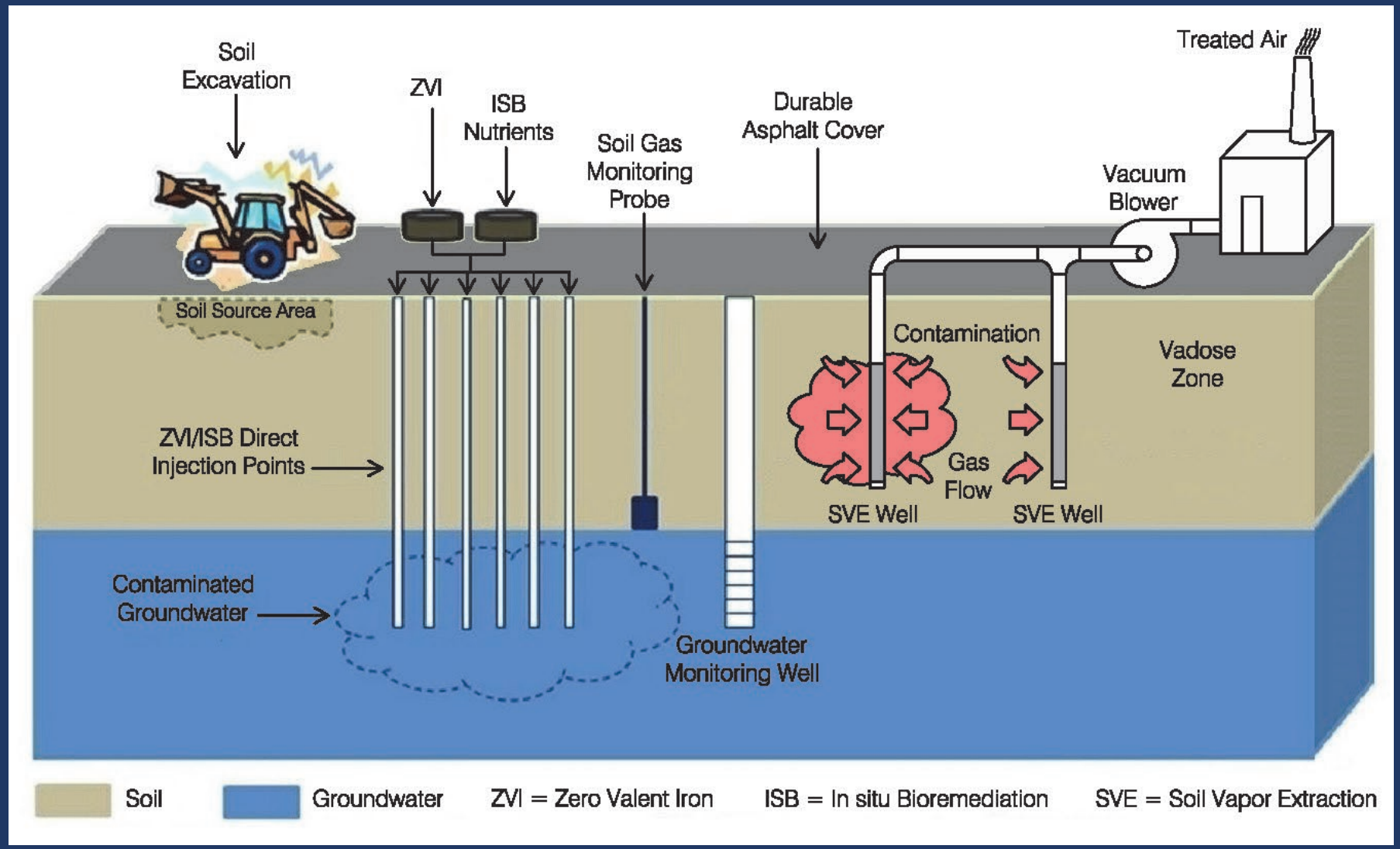
Building Demolition

Navy preparing for demolition under two programs:

1. Parcel B Building 123 (non-radiologically-impacted): removal through CERCLA process
2. Removal of buildings through special congressional authorization

Parcel B: Groundwater Treatment & Soil Vapor Extraction (SVE)

Installation Restoration Site 10 (IR-10)

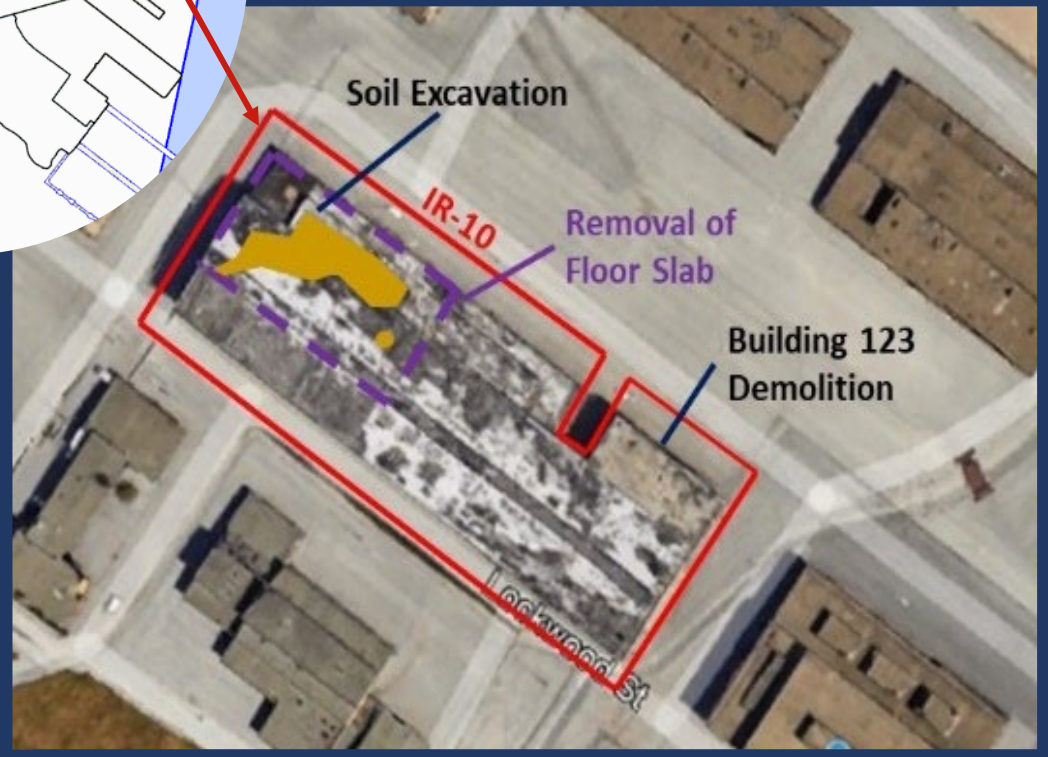


Environmentally-friendly bacteria treated groundwater

An extraction system removed vapors from soil

Parcel B IR-10 Building 123:
Non-Radiological Building Demolition and Soil Remediation

- Demolition of Building 123 allows the Navy to access contaminated soil for removal and remediation
- The Navy is investigating reuse or reclamation of building materials



IR-10 and Building 123 Site Layout

Current image of Building 123

Building 123 Demo and Remediation: Process and Timeline

Demolition of Building 123 and concrete floor slab to access contaminated soil → September 2023 – November 2023

Excavation removes contaminated soil → November 2023 – January 2024

Clean soil imported to backfill the excavation → January 2024 – February 2024

Protective durable cover installed and soil gas monitored to ensure cleanup goals are met → February 2024 – December 2024 (includes monitoring)

Building 123 Demolition: Air Monitoring and Dust Control

Control dust during demolition and excavation fieldwork

- Use dust suppression “best practices”
  - ✓ Use water at active excavation and demolition sites to reduce airborne dust
  - ✓ Apply water or soil binder to stockpiled materials
  - ✓ Monitor wind direction and speed to limit effects of dust on Shipyard neighbors
- Manage trucks with debris
  - ✓ Tarp trucks leaving work areas to reduce airborne dust
  - ✓ Monitor truck activities while on and off work sites

Example of dust suppression best practices used during excavation and demolition

Monitor air for health and safety of workers and community

- Use real-time dust monitors during construction activities
- Collect air monitor data upwind and downwind of the construction site
- Monitor wind direction and strength to ensure safe conditions
- Analyze filters with air samples to determine air quality

Example of an air monitoring station at HPNS

Special Congressional Authorization for Demolition of Buildings at HPNS

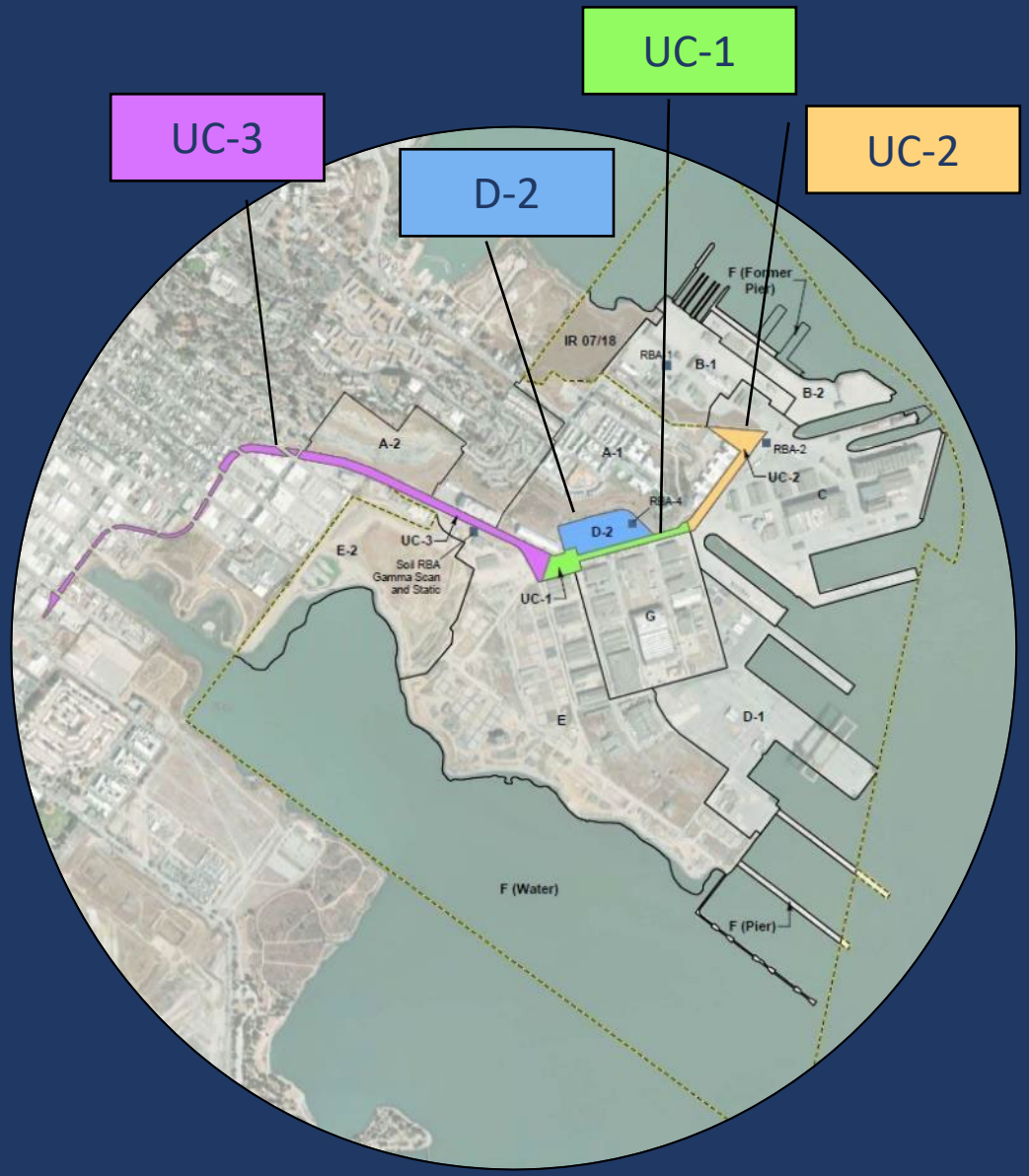
CONDUCT COMMUNITY OUTREACH (ONGOING)

- Provide updates to community
- Identify resources for local job opportunities
  - ✓ City of San Francisco Small Business Database: https://data.sfgov.org/widgets/g8m3-pdis
  - ✓ Investigating Navy workshop opportunities

AWARD CONTRACT (LATE 2024)

- Parcel G buildings with a radiological history
- Conduct pre-demolition fieldwork, including building & hazardous materials surveys
- Prepare project work plans
  - ✓ Identify disposal alternatives and approved disposal sites
  - ✓ Prepare stormwater, dust, and air quality management plans

CONDUCT DEMOLITION (BEGINS 2025)



Upcoming Fieldwork: Parcels D-2, UC-1, UC-2, and UC-3

Navy is collecting radiological data to evaluate cleanup objectives

Hunters Point Naval Shipyard (HPNS)
Navy Base Realignment and Closure (BRAC)

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Parcel D-2 and Former Utility Corridors (UCs) Overview

Site Description

- Approximately 21 acres (combined)
- Parcel D-2 is occupied by Buildings 813 and 819
- Parcels UC-1, UC-2, and UC-3 were the central utility corridors at HPNS

Historical Use

- Former shipyard utility corridors (UCs)
- D-2 is the site of former warehouse buildings and a Disaster Control Center

Environmental Cleanup Status

- Remedial action complete
- All former sanitary sewer / storm drain lines removed in 2010
- Radiological retesting begins Fall 2023

Asphalt covers the former utility corridors, as shown in this recent image of Parcel UC-2

Summary of Upcoming Fieldwork

Retesting Fieldwork

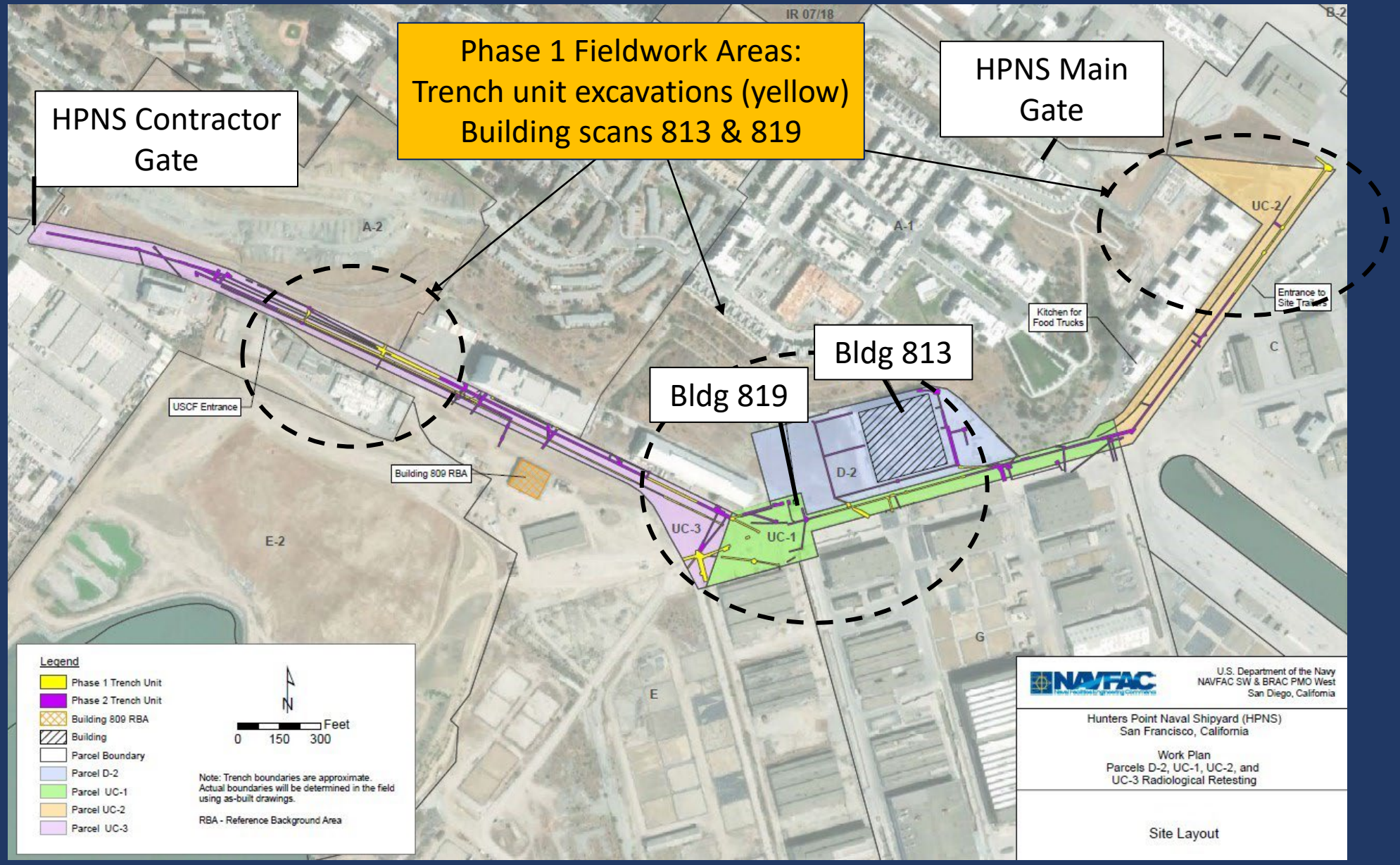
- Phase 1 Fieldwork
  - Trench Unit excavations
  - Building scans
- Phase 2 Fieldwork
  - Trench Unit soil borings

Fieldwork Schedule

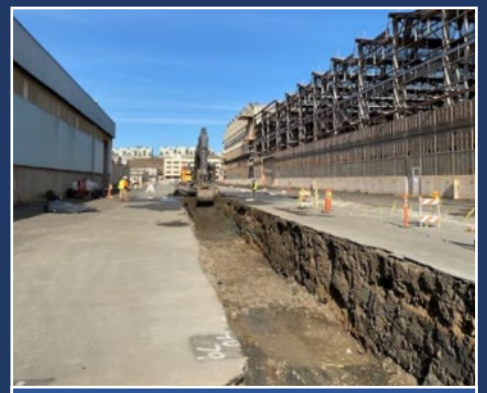
- Current status
- Phase 1 upcoming fieldwork
- Phase 2 planned fieldwork

Building 813 on Parcel D-2 will be radiologically scanned during retesting of the utility corridors

Phase 1 Fieldwork



Phase 1 Fieldwork



Excavation and Sampling

Trench Unit excavations extend 6 inches past existing trench boundaries

Screening and Sorting

Excavated material moved to radiological screening yard pads for screening and sampling

Independent Analysis

Samples are labeled and sent to an off-site lab for analysis

Regulatory agencies take confirmation samples

Backfill Trench Units

Approved soil from radiological screening yard pads or clean backfill used to fill Trench Unit excavations

Fieldwork conducted is similar to ongoing radiological retesting activities at Parcels B, C, and G.

Site Photos (June 2023)

Parcel UC-1 facing W/SW

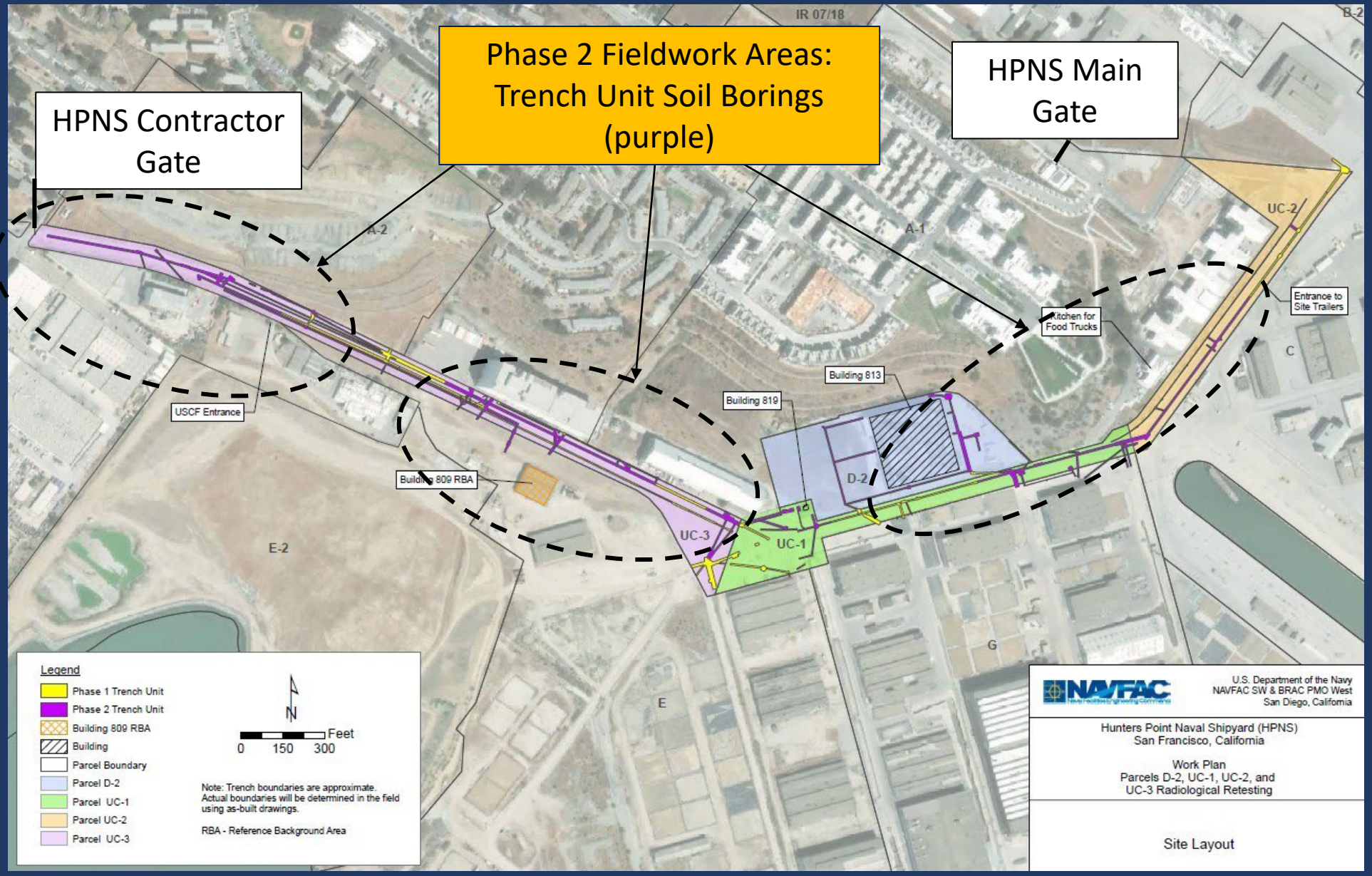
Parcel UC-2 facing NE

Parcel UC-3 facing SE

Parcel UC-1 facing E/NE

Parcel UC-3 facing NW

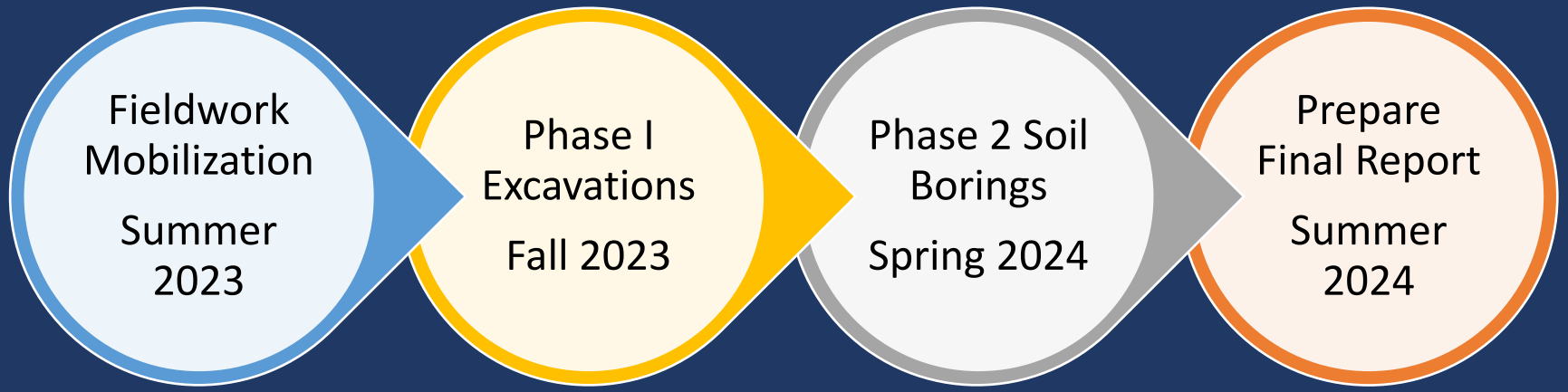
Phase 2 Fieldwork



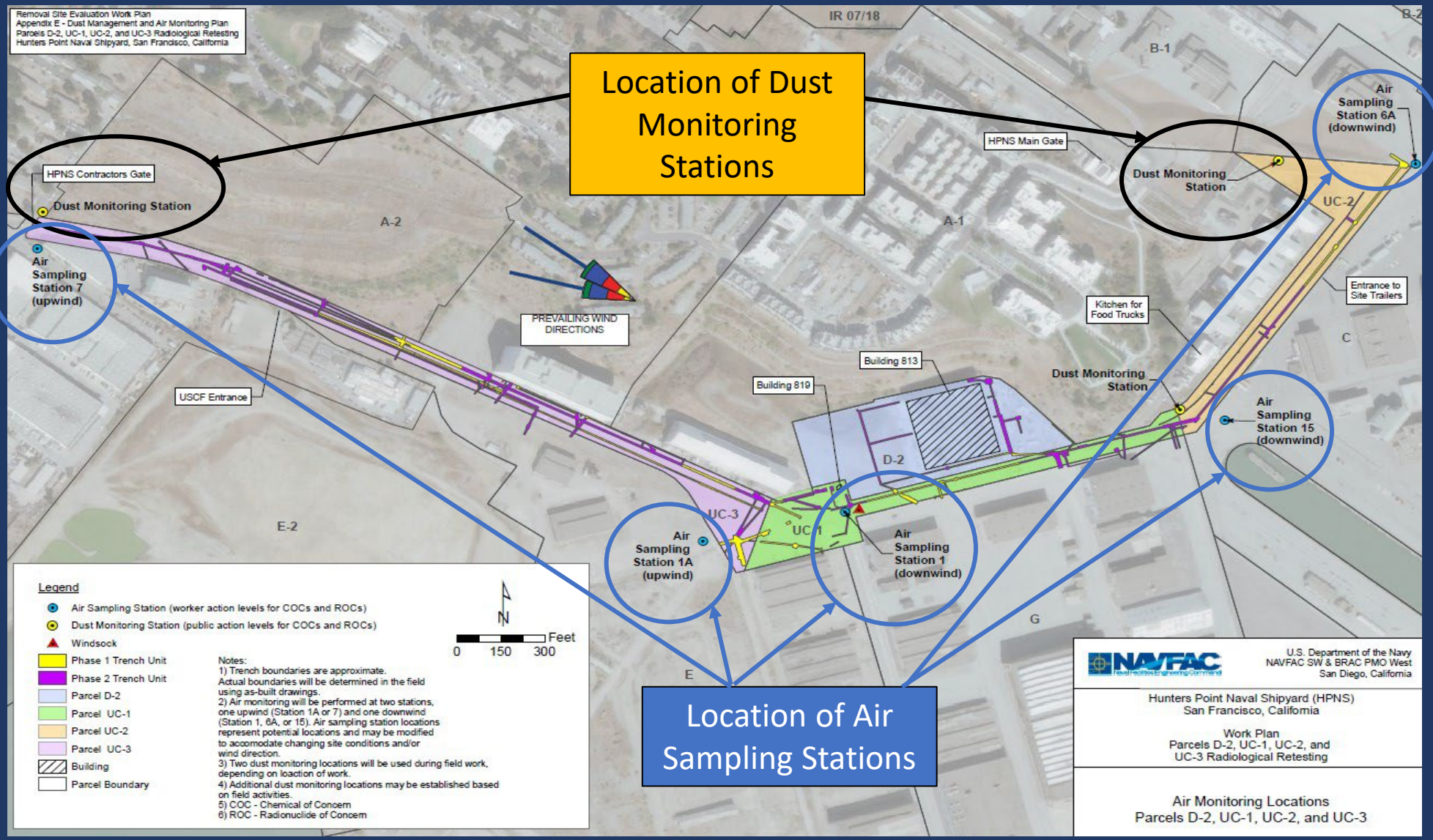
Parcel D-2 and UC Fieldwork Schedule

Current Status

- Contractors developing health & safety plans (Summer 2023)
- Mark trench unit locations (Summer 2023)
- Phase 1 Trench Unit excavations and building surveys begin (Fall 2023 – Winter 2024)
- Phase 2 Soil Borings begin (Spring 2024)

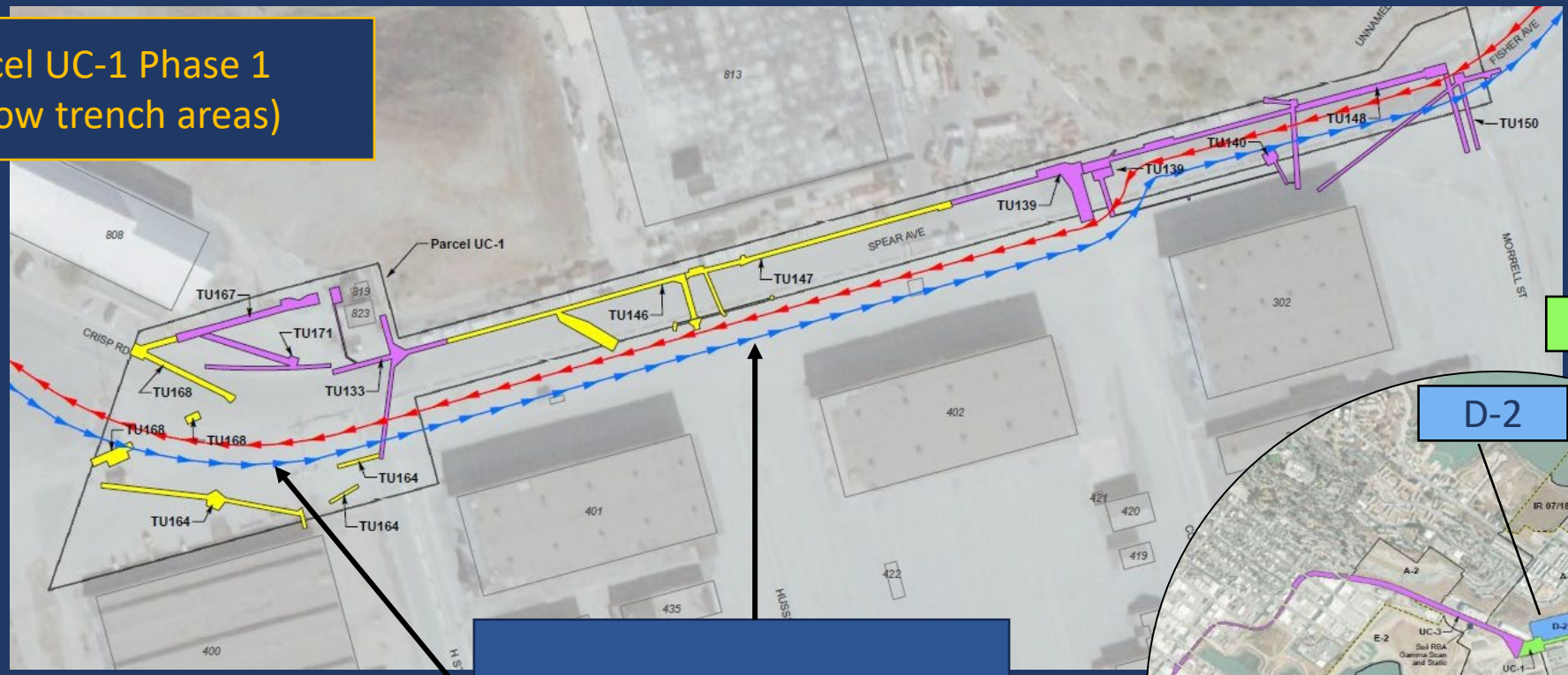


Managing Dust During Fieldwork

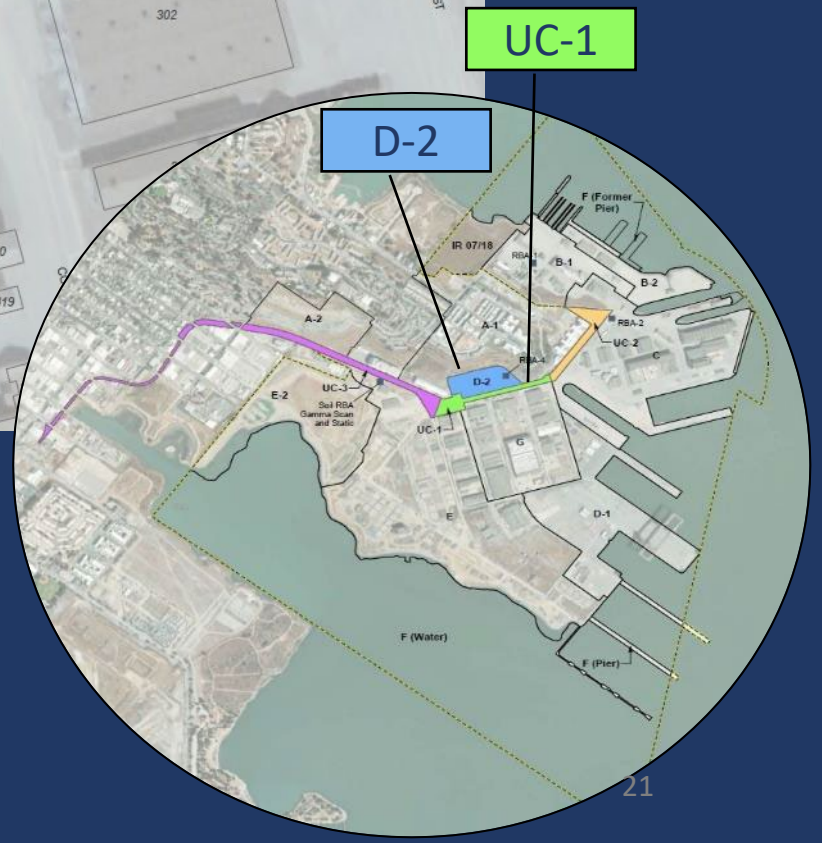


Traffic Patterns: Parcels UC-1

Parcel UC-1 Phase 1
(yellow trench areas)



Traffic will be SHIFTED on Parcel UC-1 roadways to avoid open Trench Units



Legend
- Inbound traffic
- Outbound traffic
- Phase 1 Trench Unit
- Phase 2 Trench Unit
- Parcel UC-1
- Building

N

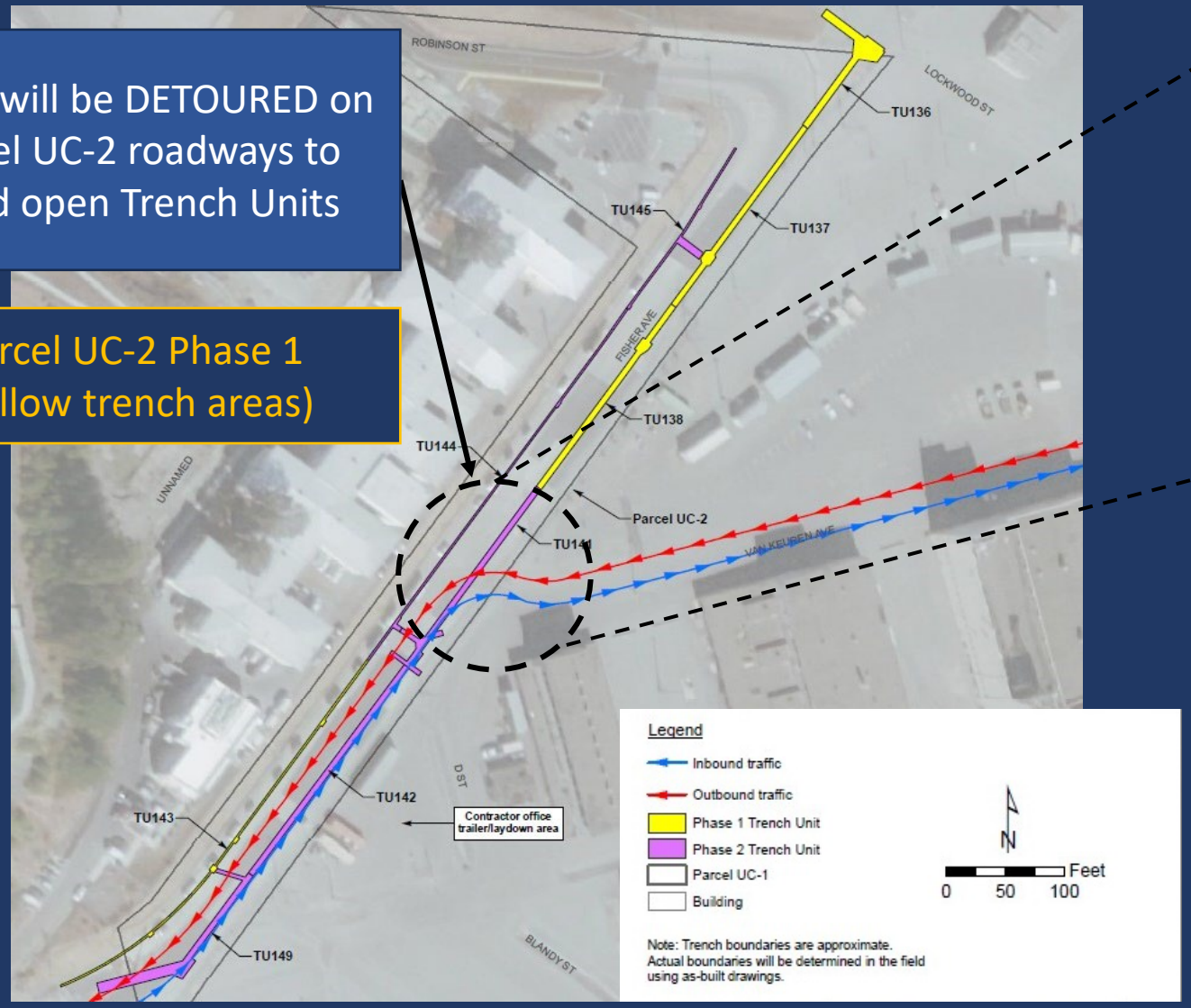
0 50 100 Feet

Note: Trench boundaries are approximate. Actual boundaries will be determined in the field using as-built drawings.

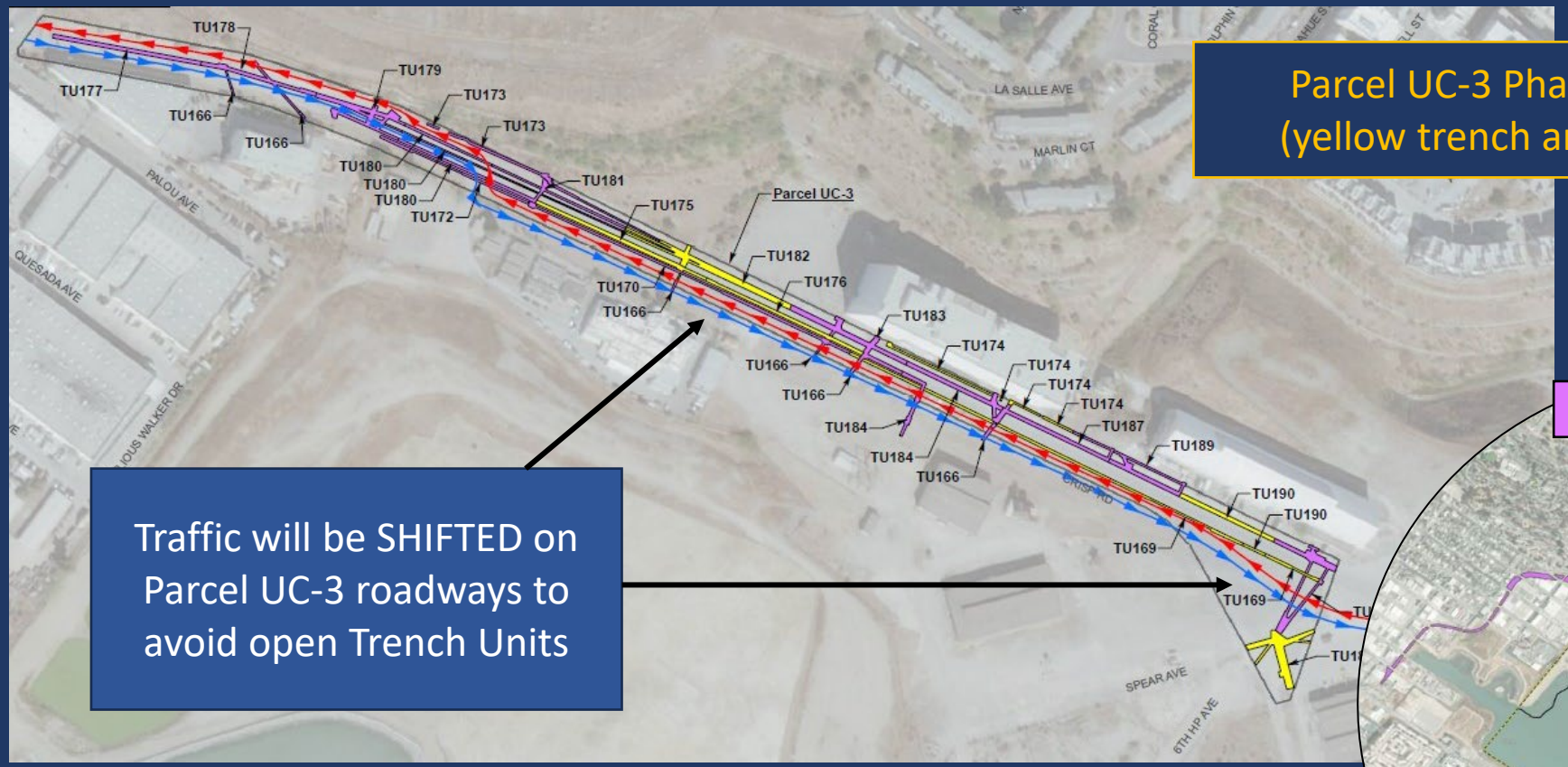
Traffic Patterns: Parcel UC-2

Traffic will be DETOURED on Parcel UC-2 roadways to avoid open Trench Units

Parcel UC-2 Phase 1 (yellow trench areas)

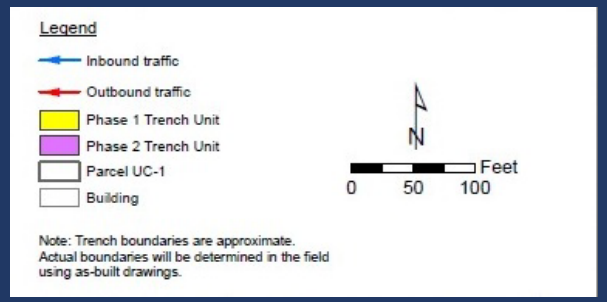


Traffic Patterns: Parcel UC-3

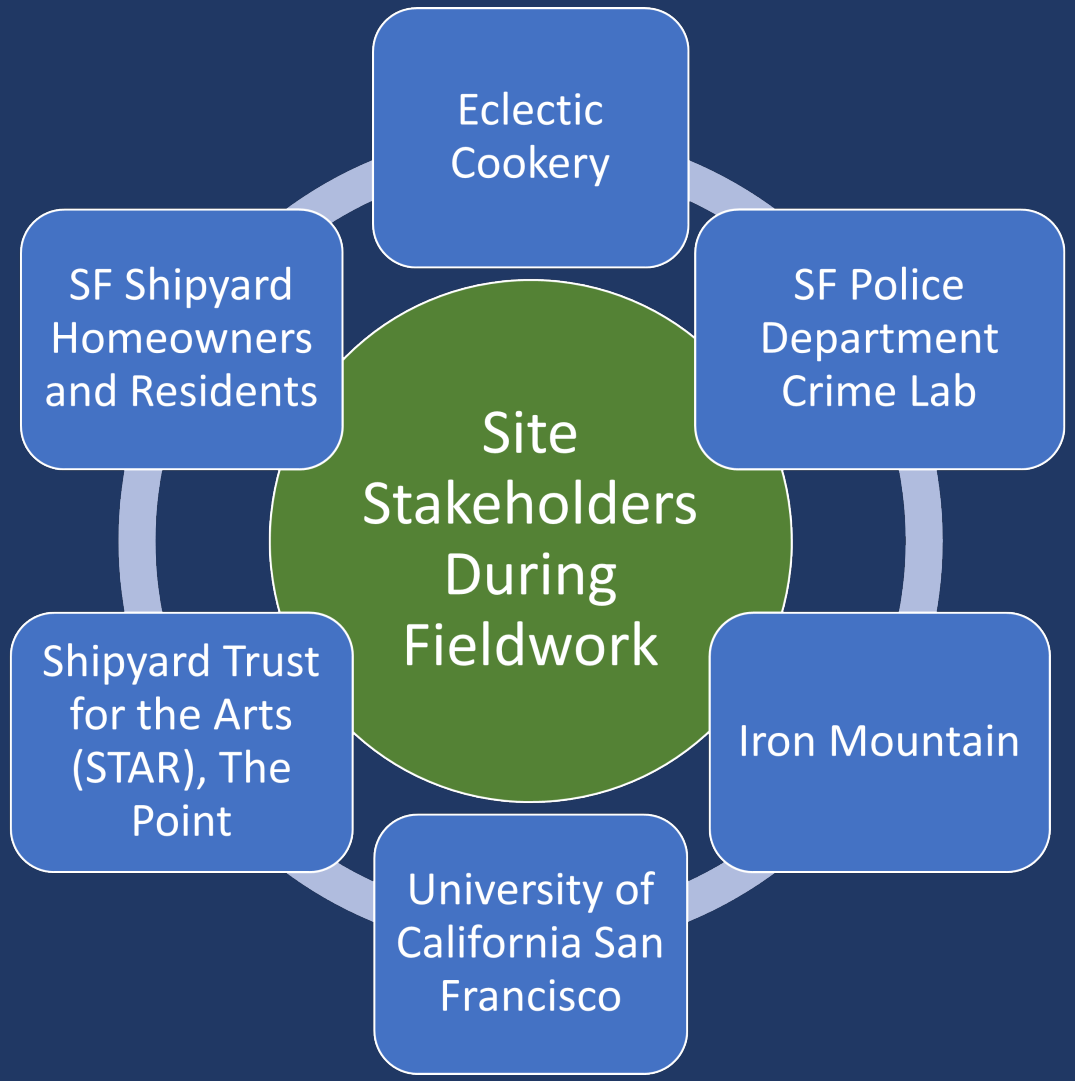


Parcel UC-3 Phase 1
(yellow trench areas)

Traffic will be SHIFTED on Parcel UC-3 roadways to avoid open Trench Units



Stakeholder Outreach



The Navy will share information with individuals and groups before and during fieldwork

- To provide information on fieldwork activities
- To update them about shifts in traffic patterns
- To answer questions and resolve issues

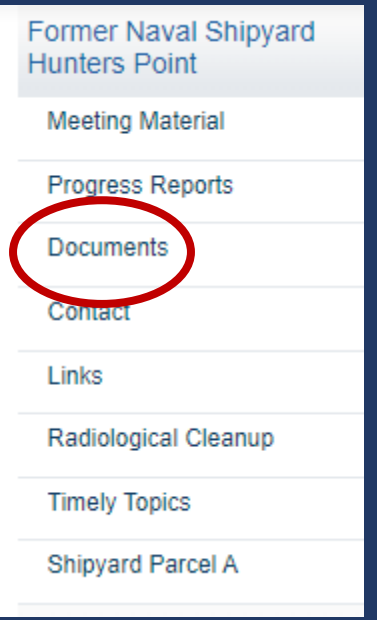
FOR MORE INFORMATION

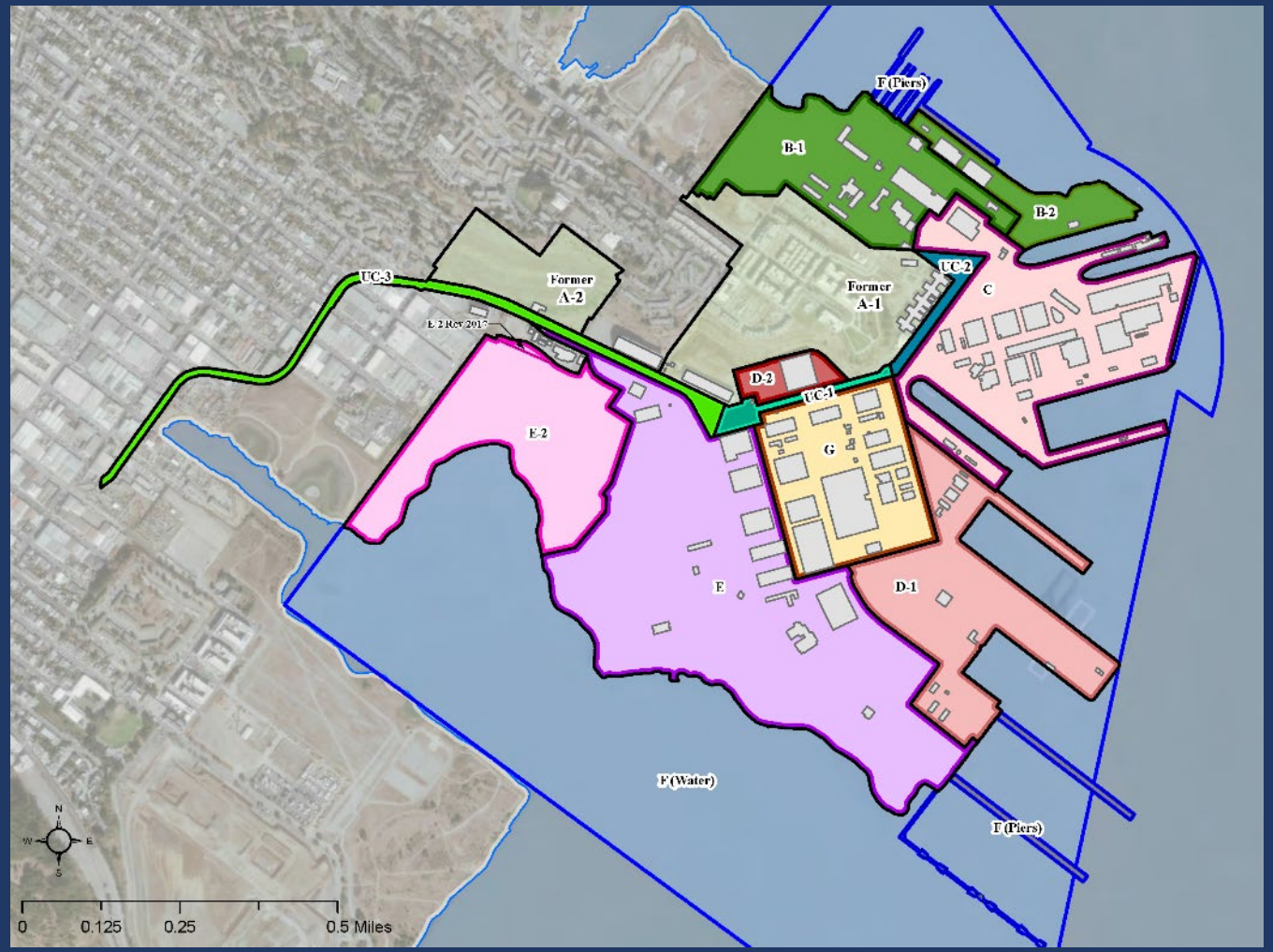
Visit the Navy's website at

www.bracpmo.navy.mil/hpns

Click on DOCUMENTS page

- **Parcel documents:** Click on **PARCELS** tab
- **Dust and Air Quality:** Click on **AIR MONITORING** tab





Map of HPNS Parcels

Climate Resilience Assessment for Hunters Point Naval Shipyard Five-Year Review Report

Hunters Point Naval Shipyard (HPNS)
Navy Base Realignment and Closure (BRAC)

NAVFAC

Five-Year Review (FYR) Process

The FYR:

- Evaluates if a cleanup remedy protects or will protect human health and the environment
- Offers recommendations to address issues for remedy improvement as needed
- Takes into account any new information for evaluating remedy protectiveness
- Required by federal law at a minimum every five years
- Navy works with federal and state regulators

Fifth Five-Year Review will be available at www.BRACPMO.Navy.mil/HPNS

HPNS Climate Resilience Assessment

- Navy completed a screening level Climate Resilience Assessment (CRA) of the cleanup actions at HPNS
- The assessment evaluated climate change impacts to the long-term protectiveness of the cleanup actions throughout HPNS
- The CRA focused on sea level rise (SLR) and groundwater rise for the entire installation
- This assessment will be part of the FYRs
- The CRA will be re-evaluated in future FYRs

HPNS Climate Resilience Assessment

Primary References and Sources of information include:

- DoD Climate Assessment Tool (DCAT): screens installation to see which climate change hazards apply (e.g., sea level rise (SLR), drought, fire, flooding)
- Regional Sea Level Scenarios for Coastal Risk Management
  - https://toolkit.climate.gov/
- DoD Regional Sea Level (DRSL) database – models future coastal flooding scenarios
  - https://drsl.serdp-estcp.org/site.org
- Groundwater Rise – Used HPNS basewide groundwater dataset (20 years & 125 wells); apply 1:1 ratio (sea level rise : groundwater rise) consistent with City of Alameda (2020)

Guidance Used for Development of HPNS Climate Change/Sea Level Rise Assessment

Navy's assessment was guided by the following sources:

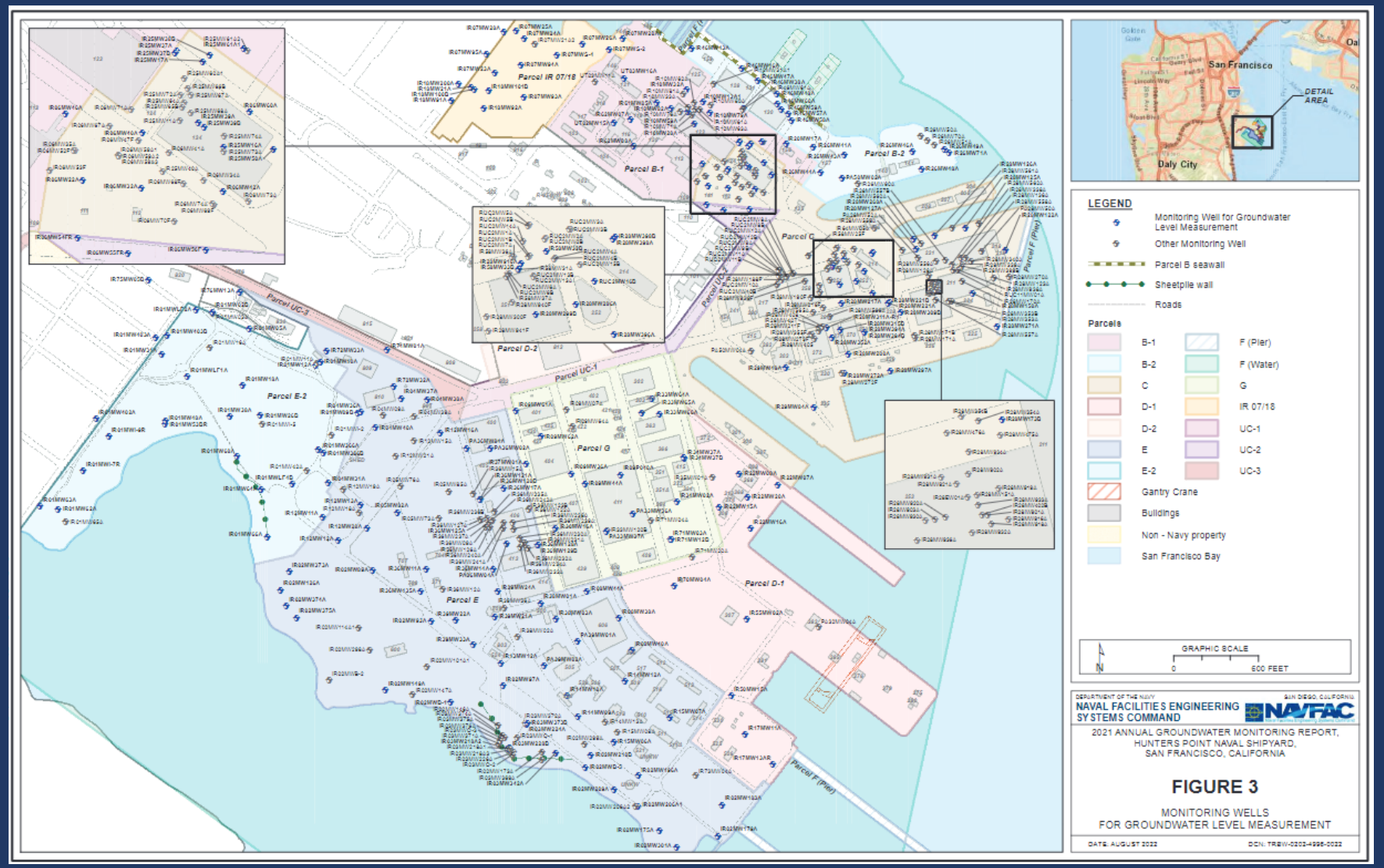
- Department of Toxic Substances Control's Draft *Sea Level Rise Guidance to DTSC Project Managers for Cleanup Activities* (2023)
- State of Washington, Department of Ecology's *Sustainable Remediation: Climate Change Resiliency and Green Remediation* (2023)
- US EPA's *Guidance on Climate Resilience in Superfund Planning* (2021)
- State Water Resources Control Board's various guidance documents found at https://www.waterboards.ca.gov/climate/
- City of Alameda's *Climate Adaptation and Hazard Mitigation Plan* (2022)
- Draft Guidance on Climate Resilience Assessment at the Navy's Environmental Restoration Sites (2023)

Climate Resilience Assessment in Five-Year Review

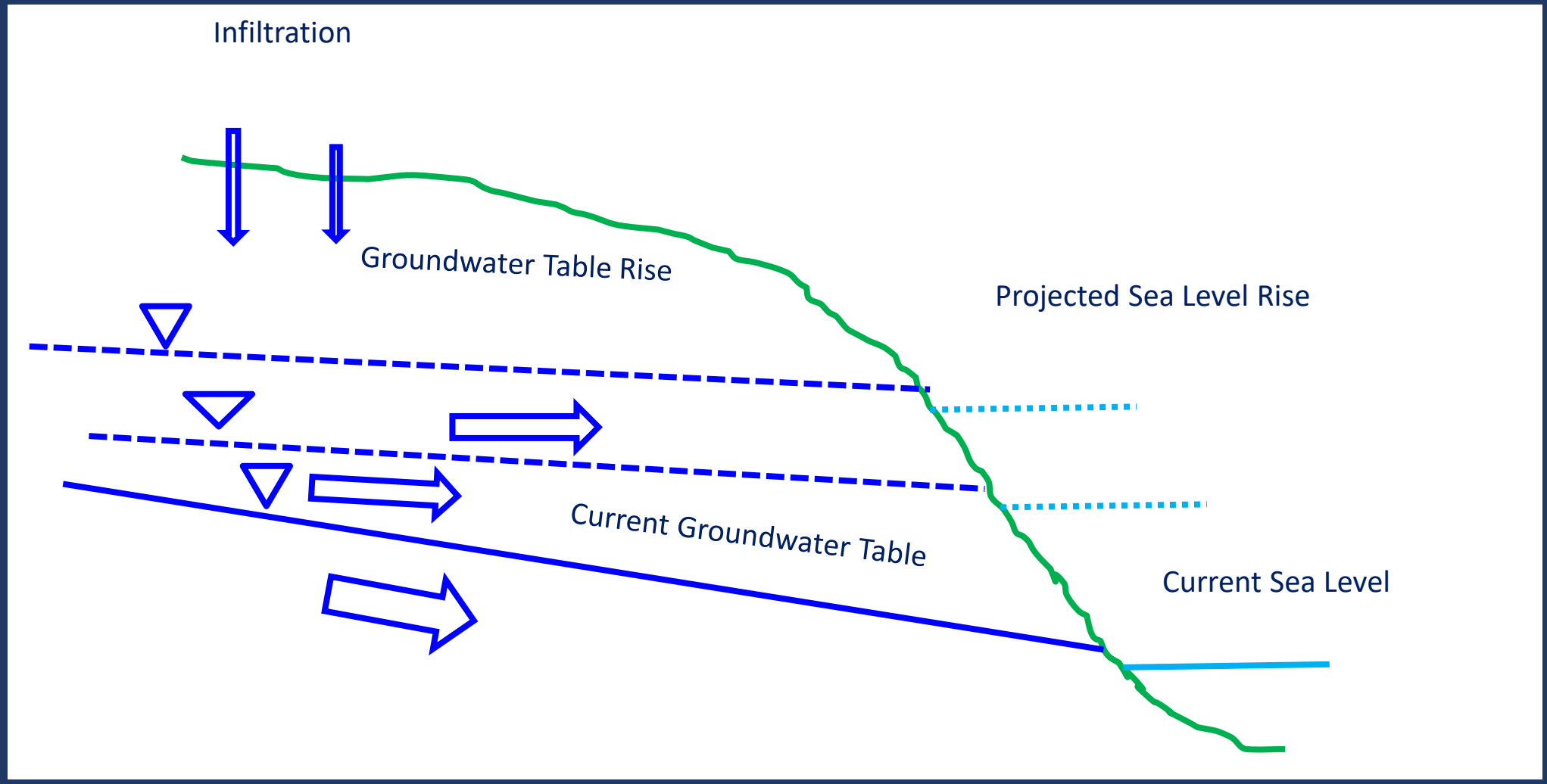
Five Year Review Question C: **"Has any other information come to light that could call into question the protectiveness of the remedy?"**

- Evaluated for each site in the Five-Year Review
- If no, site and remedy are not affected by or are adaptive to climate change impacts
- If yes, there are potential vulnerabilities
- Evaluated for the current and future timeframes
- Findings and Recommendations
  - Vulnerabilities
  - More detailed studies/monitoring

Substantial Network of HPNS Monitoring Well Data



Groundwater Table and Sea Level Rise Concept



Department of Defense Regional Sea Level (DRSL) Projections

DRSL projections are consistent with California Ocean Protection Council (2018) projections

- DRSL projections include land subsidence
- Accounts for global greenhouse gas emissions scenarios
- Includes vertical land movement
- For the year 2035, the DRSL site-specific projected sea level rise range is from 0.3 to 1.0 foot

Future Property Developments

- India Basin, Mission Rock, and Candlestick Point coastal area developments
- Developers are planning for future, potential sea level rise impacts
- Raising ground levels by adding fill

India Basin Rendition

Mission Rock Rendition

*image source: sfplanning.org

HPNS Five-Year Review Schedule

Strontium-90 Update

Strontium-90 (Sr-90) Update

- Community is not at risk
  - Air monitoring
  - Dust monitoring
  - Radiological monitoring
- Navy is working with the regulatory agencies to determine best analytical method to reliably measure Sr-90 at low concentrations
  - Verification study to resolve problems with the initial analytical method
  - Meeting this week to verify the new method is reliable for our site-specific conditions
- Navy, US EPA, DTSC, and CDPH are in agreement that the focus is completing the Sr-90 verification study and publishing a comprehensive report
- HPS CAC meeting updates as the verification study progresses

Sr-90 Verification Study

- July 19 – Verification study scoping meeting
- August 1 – Draft Field Change Request (FCR) to Quality Assurance/informally submitted to Regulatory Agencies
- October 15 – Final FCR issue
- November 30 – Laboratory data received
- December 31 – Validated data received from 3rd party validator
- February 28 – Draft Report submitted to regulatory agencies
- April 30 – Regulatory agency comments received
- May 31 – Draft Final report issued to regulatory agencies*
- June 30 – Final report issued to regulatory agencies

*report made available to the public

Resources for More Information

HPNS Program Management

Michael Pound
(619) 524-6026
michael.j.pound.civ@us.navy.mil

Navy BRAC PMO West
33000 Nixie Way, Bldg 50, Suite 207
San Diego, CA 92147
www.bracpmo.navy.mil/hpns

Regulatory Agencies

Andrew Bain, US Environmental Protection Agency
bain.andrew@epa.gov

Michael Howley, CA Dept. of Toxic Substances Control
michael.howley@dtsc.ca.gov

Mary Snow, San Francisco Reg'l Water Quality Control Board
mary.snow@waterboards.ca.gov

Other Resources

Community Technical Advisor

Dr. Kathryn Higley
(541) 737-7036
kathryn.higley@oregonstate.edu
www.ne.oregonstate.edu

HPNS Information Repository

San Francisco Public Library (Main Branch)
100 Larkin Street, 5th Floor, Gov't Information Center

Visit www.bracpmo.navy.mil/HPNS to link to the online HPNS Administrative Record (on the home page and documents page)

HPNS Community Outreach

Send an email or leave a message

- For program information
- To join the HPNS Mailing List
- To request language assistance

Email info@sfhpns.com

(415) 295-4742